Super Pilots, Subsidizing or Self-Organization: Stimulating E-Government Initiatives in Dutch Local Governments

Marcel Hoogwout

Department of Business, Public Administration and Technology (BBT)
University Twente
PO box 217, 7500 AE Enschede, The Netherlands
m.hoogwout@utwente.nl

Abstract. Like many other western countries, the Dutch central government has several programs to stimulate E-government development in local governments. The constitutional relations between central and local governments in The Netherlands, however, are such, that the development of online service delivery is part of the autonomy of the local authorities. Central government has little formal authority to command development efforts on a local level. Through a PR-offensive, subsidy programs and intervening as a market party, the central government tries to convince the local authorities to invest in the development of online service delivery. This paper describes three different approaches used by the Dutch central government to stimulate E-government initiatives in local governments. The central question is to what extent each approach contributes to the e-government aims of central government.

1 Introduction

In line with the e-Europe program of the European Commission (DGXII, Information Society) the Dutch central government also has formulated high aims to stimulate e-government (BZK 2000). These aims include to: get all local governments online by the end of 2002, have 75% of all services online in 2006, have 5 million citizens with electronic identity cards in 2006, decrease the administrative burden for companies with 25% in 2006, have online interactive policy development (E-democracy) commonly accepted in 2006 and increase productivity of public administrations with 10%. In the Dutch system, local governments account for approximately 70% of all government service transactions. It is therefore crucial to convince them to get their services online. The past years large sums of taxpayers' money have been allocated to realize the high aims. Example programs are Public Counter 2000 (OL2000), Electronic Government under Construction (ELO) and Knowledge Neighborhoods. The results of these programs are questionable. Even in 2003, only a few local governments offer limited online interactive services. The Netherlands is losing its position as a frontrunner in innovative and service oriented government. Even though much can be said about the soundness of the reports that compare the e-government positions of different countries, in the Netherlands it is generally accepted that the Dutch competitive advantage is changing for the worse. The pace in which Dutch governments can develop and adapt new internet technologies seems to have reached

its limits. Three groups of causes can be distinguished to explain the limited progress in local government (Kraaijenbrink 2002): (1) Local governments are *not allowed* to deliver services through the internet. Legal constraints pertaining to, for example, online identification forbid them to accept online applications as legally binding. (2) Local governments are *not able* to do so. This is caused by a lack of budget, and/or knowledge. (3) Local governments are *not willing* to invest in e-government projects, even if they have the means. The local government system lacks the right incentives that are necessary to create a sense of urgency. Dutch central government tries to overcome these constraints in different ways. Three of them are discussed in this paper: The 'Super pilots' case is an example of straightforward subsidizing of some promising initiatives. In the super pilots project three city authorities have received considerable subsidies to build electronic counters for all transaction services. In a second approach, the central government developed an internet application, the 'VIND-catalogue' ('FIND'-catalogue), containing descriptions of all services local governments can offer. They offered the catalogue module free of charge to all 496 Dutch local governments. The third approach is the joint development of an internet interaction module by a group of cooperating local governments. This module enables citizens to track and trace the status of their building permit application online. In the next paragraphs these approaches will be described and analyzed. The primal focus will be on the effectiveness of each approach for the distribution of innovative E-Government solutions among local governments.

2   The Super Pilots

In March 2001, the Dutch Ministry of the Interior started a program that offered the cities of Enschede, The Hague and Eindhoven a sum of   2.8 mln. each to build functionally rich online electronic counters for local government services. In return for this financial support, these cities are obliged to publish the blueprints of their designs. The aim of this openness is to promote other local authorities to use these blueprints for designing and building their own electronic public counters. Also, commercial software developers can use the blueprints free of charge to develop their own standardized solutions to be sold to other local governments. The Ministry of the Interior hopes that the example set by the pilot cities and the free blueprints will stimulate the use of e-government solutions by local governments.

The main objection to this approach, typical for subsidizing pilot projects, is that the results are still very hard to copy by other governments. The solutions that are translated into blueprints, are tailored to the circumstances typical for only one local authority. Other local governments can only copy or take over a complete solution, if they are prepared to invest considerable amounts of efforts and resources into tailoring it to their situation. They still have to take the blueprints to their own software developer to build the plan. They still have to adjust the plan to their own processes and infrastructures. The reduction in development and implementation costs is very limited compared to the costs that still have to be made. As for the commercial software developers, who can use the blueprints for free, the risk of the development of their own commercial solution has diminished only slightly. Although the super pilot program is still not finished, the chances of a wide spread of the solutions developed by the three super pilot cities seem already very limited.

3   The VIND-Catalogue

One of the initiatives of the OL2000 Program Office, the Dutch government initiative to stimulate service oriented government, is a project called the 'VIND-Catalogue'. A project has been tendered to create a digital catalogue with information on all local government products and services. The catalogue is a product that can be incorporated in each local authority's website. It should be adjustable to the local offering of products and services. Citizens can consult the catalogue online for questions like, what services do I need, what procedure should be followed and which forms do I need to fill in. The catalogue is designed to determine which products and services are applicable to the citizen's specific situation. Because most local governments offer the same set of products and services (Leenes and Svensson 2002) the VIND-catalogue comes with a centralized content management solution. An editor, related to the association of local authorities, guarantees regular updates in return for a subscription fee. To introduce the VIND-catalogue in their local community, local governments could apply for a subsidy. This not only made the acquisition of the catalogue free of charge, but also generated direct financial benefits for them by acquiring it. This associated subsidy program contributed substantially to the success of the introduction of the catalogue in Dutch local governments.

The OL2000 Program Office, acting on behalf of the Ministry of Internal Affairs, has chosen to have the catalogue developed, instead of leaving the development, implementation and adoption to the market. By doing so, it purposely neglected the fact that several commercial software companies already offered a comparable product to local governments. There already was a market for this kind of product, although still immature. The Program Office even, for a while, negotiated with one of the suppliers to buy the rights of one of the existing products. However, since no acceptable price could be agreed upon, the Program Office decided to fund the development of a new catalogue.

The free of charge offering of the VIND-catalogue stirred up the discussion about the role of government in the marketplace. The investments in product development by the commercial software developers, who had already developed a catalogue solution, became instantly worthless. Something, that –obviously- did not amuse these developers. The question was raised if central government did not complicate matters by intervening in the market the way they did. The eagerness for software developers to invest in the development of e-government solutions for local governments could be extinguished for a long time. The chance that central government would repeat this kind of market intervention and, by doing so, destroy the initial investments could not be neglected anymore. A reluctant supply side in the market of e-government solutions increases the necessity for central government to intervene. This could provoke a negative spiral of events that could make the adoption of e-government applications in local government more difficult.

In 2000 the Nobel Price winner Joseph Stiglitz and his associates published a noteworthy report on this issue for the American based Computer & Communications Industry Association (CCIA) (Stiglitz, Orszag et al. 2000). Based on the current knowledge about market oriented economies, Stiglitz states three sets of principles for governments to determine if government intervention is opportune: green light principles (activities which governments should undertake with little concern), yellow light principles (activities which governments should undertake with caution) and red

light principles (activities which governments generally should not undertake). The relevant principles in the VIND-catalogue case are: principle 1: providing public data and information is a proper governmental role (green light), principle 4: governments should exercise caution in adding specialized values to public data and information (yellow light) and principle 10: the governments should exercise substantial caution in entering markets in which private-sector firms are active (red light) The Dutch economy shares the basic neo liberal assumptions with the American economy. The Stiglitz principles could therefore be considered appropriate for the Dutch situation as well. Although the VIND-catalogue aims at providing public data and information (principle 1), the product adds value to this information by providing a complex search engine (principle 4), in a market where private firms are active with competitive products (principle 10). The VIND-catalogue approach conflicts with at least two of the principles. The VIND-catalogue, as a software product, does not fit one of the two critical properties for a public good. Although it can be considered as non-rivalrous, due to low reproduction cost, it is definitely excludable. So, also current economic theory suggests a less intervening role for central government in the VIND-catalogue approach.

4   The Track-and-Trace Module for Building Permits

A completely different approach was followed by a group of cooperating local government on the subject of building permit applications. This group is organized in a platform (Platform Bouw en Woningtoezicht Grote Gemeenten) and consists of the department heads of the 34 largest building permit departments in the Netherlands. This group was agitated by the fact that there are too few suppliers for innovative e-government solutions in the field of building permit service delivery. Together they developed a 'program of demands' for an internet module that should make it possible for citizens to track and trace the status of their building permit application online. The application for a (normal) building permit legally can take up to thirteen weeks in which the application has to pass several different tests. Each test can cause a change in the status of the application. The group used the program of demands to agree upon a protocol for information exchange between the two main suppliers of back office systems for building permits and developers of front office / internet modules. With this protocol in hand, and the guarantee that nine building permit departments would buy the product instantly, the two main suppliers each developed, for their own account and own risk, a version of a internet status information module. Now all departments can choose from at least three different products to disclose the information about application status in their back office systems. Central government subsidized the initiative with a small financial gesture at the end of the project to emphasize their appreciation of the approach and the cooperation between the building permit departments. The approach used by the building permit departments has several important advantages: (1) The development is demand driven instead of supply driven. It is fulfilling a need of the departments. (2) The dependency on the supplier that also has developed their back office system has been diminished. One can choose between several suppliers regardless of the brand of back office system that one is using. (3) The so called lock-in effect, the dependency on the one supplier that provided the main workflow systems, disappeared. (4) The approach was also

interesting and profitable for the suppliers. The guarantee from a group of departments to buy the modules, was enough for them to invest in the development. The approach followed by the building permit departments also has disadvantages. Because of the cooperation construction and the multi party negotiations between several departments and suppliers, the process took a considerable amount of time. The lack of a central director reduced the incentives for the involved parties to deliver as soon as possible. The question whether this approach would work in other situations as well still stands.

5   Lessons Learned

The three different approaches towards e-government stimulation in local authorities, described in this article, are typical for a government that does not want to use hierarchical means to enforce the distribution of e-government innovations. The Dutch government did not -and still does not- want to interfere in the autonomy of the local authorities. Therefore a policy of facilitation and stimulation using only positive incentives is used to interest local authorities to invest in e-government solutions. The three approaches discussed in this chapter show this policy to be effective only in specific situations. What can we learn from this? The question how, and up to what extent, central governments should stimulate the use of innovations is a classical dilemma. In the case of the use of e-government solutions by local authorities we encounter two dominant dimensions that seem to determine the effectiveness of an approach.

   First is the dimension of the stage of the innovation process. An approach can be effective in one stage while it seems to be useless in another. Stages that can be observed in the three Dutch cases are (1) the development of the new e-government technology, (2) the testing of the technology, (3) creating awareness for the new technology and (4) the distribution of the technology. The three cases in this article have been measured by their effectiveness in the last stage of the innovation process, the distribution of the technology over a large as possible group of local authorities. The super pilot approach is in this comparison the least attractive way to stimulate the distribution of e-government innovations by central government (i.c. the forth stage). The considerable costs of the approach only suits a very limited group of local governments and suppliers, while the chances of further adoption of the developed solutions are expected to be limited. The most important value of this approach is the awareness effect, the ability to interest other local governments in the possibilities of e-government (the third stage). Considering the costs of the super pilots the question can be raised if the same effects can be reached in a -for the tax payer- less expensive way. Both other approaches seem to build their success on the characteristics of the innovation at hand. They cannot be considered to be a first stage project. No existing primary processes had to be changed and no existing back office systems had to be replaced. The added value of both approaches towards e-government stimulation on a large scale is for that reason not certain.

   The second dimension, that is highly relevant for the use and the effectiveness of the different approaches concerns the market characteristics. Are there enough local authorities that are willing to use the innovation? And, are there enough suppliers willing to take the risk to develop these solutions and to offer them to the local

authorities for reasonable prices? If demand is evident but suppliers don't dare to take the risk of developing the right product, an approach as applied by the Dutch building permit departments, seems to be appropriate. If there are suppliers that only reach a small group of local authorities, further investigation of the demand side is desired: a subsidizing program, like the one that supported the VIND-catalogue, can be helpful if local authorities are willing to innovate, but have a financing problem, which prevents them from doing the right thing. Introducing an information standard or certification instrument can provide certainty if the risk of a dependency on one specific technology or supplier is too high. The building permit departments followed this approach. If the local authorities are unaware of the technology, pilot projects might offer a solution. If neither demand nor supply are interested in a specific e-government innovation, central government has a difficult choice. It may be wise to reconsider the need for the e-government innovation. The development of a local government e-government solution by central government - the way this is done in the case of the VIND-catalogue - is only worth considering in a situation where central government has ponderous arguments to thrive for the adoption of the innovation by a large group of local authorities. The Stiglitz principles for government intervention 'in a digital age' can be a useful tool to decide upon the type of innovation stimulation one should apply.

References

1. BZK (2000). Contract met de toekomst. Den Haag, Ministerie van Binnenlandse Zaken en Koninkrijksrelaties.
2. Kraaijenbrink, J. (2002). De lange weg: een onderzoek naar knelpunten bij interorganisationele samenwerking rond geïntegreerde loketten. Enschede, Univ. Twente.
3. Leenes, R.E., and J.S. Svensson. "Size matters – electronic service delivery by municipalities?" In *Electronic government – first international conference, egov 2002, Aix-en-Provcence, France*, ed. R. Traunmüller, K. Lenk, 150–156. Heidelberg: Springer, 2002.
4. Stiglitz, J.E., P.R. Orszag, et al. (2000). The role of government in a digital age, Computer & Communications Industry Association (CCIA).